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## **VIA ECFS**

Marlene H. Dortch Secretary Federal Communications Commission 445 12<sup>th</sup> Street, SW Washington, DC 20554

Re: Expanding Flexible Use of the 3.7 to 4.2 GHz Band, GN Docket No. 18-122

Dear Ms. Dortch:

ACA Connects – America's Communications Association ("ACA Connects") submits this letter to clarify aspects of the 5G Plus Plan¹ in response to a presentation filed by National Public Radio ("NPR") in the above-captioned proceeding.² Included in NPR's presentation is a chart that purports to show how various C-Band reallocation proposals, including the 5G Plus Plan, would meet the needs of public radio stations that rely on the C-Band to deliver programming.³ However, the chart does not present a complete picture of the 5G Plus Plan's protections for public radio or how these protections compare with those of alternative plans. In fact, the 5G Plus Plan is comparable or superior to the CBA plan across all of the criteria identified by NPR. Among other things, even as it refarms 370 megahertz of C-Band spectrum for 5G, the 5G Plus Plan reserves more than sufficient capacity for continued satellite use in the band. It does so by funding the transition of multichannel video programming distributor ("MVPD") traffic to fiber and confining continued satellite use to non-MVPD traffic. The 5G Plus Plan would also ensure greater protection for all stakeholders, including C-Band users and the satellite operators themselves, making them better than whole.

<sup>&</sup>lt;sup>1</sup> See Letter From Pantelis Michalopoulos, Counsel to ACA Connects, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 at Attachment (filed July 9, 2019) ("5G Plus Plan Detailed Proposal"); Letter From Brian Hurley, ACA Connects, to Marlene H. Dortch, Secretary, FCC, GN Docket No. 18-122 at Attachment (filed October 2, 2019) ("5G Plus Plan Supplement").

<sup>&</sup>lt;sup>2</sup> See Letter From Gregory Lewis, NPR, to Marlene H. Dortch, Secretary, FCC at Attachment (filed Oct. 8, 2019).

<sup>&</sup>lt;sup>3</sup> *See id.* at 12.

In response to NPR's filing, ACA Connects makes the following specific points:

- The amount of C-Band spectrum to be cleared is a key factor in assessing the merits of different plans. As an initial matter, NPR's analysis of the C-Band Alliance ("CBA") plan is premised on that plan clearing only 200 megahertz of the band for 5G. Yet recent reports indicate that the CBA may come forth with a revised plan that reallocates a larger swathe of the band, perhaps as much as 300 megahertz. Until the CBA reaches a final conclusion on the amount of spectrum it proposes to be reallocated, and submits into the record its plan for doing so, it is premature to conclude that the CBA's plan affords sufficient protections for public radio stations or any other class of existing C-Band users.
- Migrating MVPD traffic to fiber mitigates congestion concerns. ACA Connects disputes NPR's contention that the 5G Plus Plan would produce a "smaller more congested band." Congestion depends not only the amount of spectrum allocated for a particular use but also on the amount of traffic that needs to be delivered through use of that spectrum. Because the 5G Plus Plan contemplates that MVPD operations would vacate the C-Band, other incumbent users could be repacked into a smaller portion of the band without necessarily producing any increase in congestion. The CBA plan, by contrast, would force all existing C-Band downlink operations, including multichannel video, into a portion of the band no larger than 300 megahertz in size and perhaps as small as 200 megahertz. There is no basis to conclude that the CBA plan is less likely than the 5G Plus Plan to produce congestion in the portion of the band reserved for satellite downlink operations.
- The 5G Plus Plan leaves "full-band, full-arc" protections intact. Within the 130 megahertz of C-Band spectrum that would remain for satellite downlink operations under the 5G Plus Plan, earth station users would retain "full-band, full-arc" coordination. On this point, too, the 5G Plus Plan offers protections for incumbent earth station users that are comparable to those of the current CBA plan. Non-MVPD users would retain the ability under our plan to receive the service from all points on the arc across the remaining spectrum.

<sup>4</sup> See, e.g., Caleb Henry, "FCC commissioner defends C-Band Alliance but renews call for more 5G spectrum," Space News, Sept. 25, 2019, <a href="https://spacenews.com/fcc-commissioner-defends-c-band-alliance-but-renews-call-for-more-5g-spectrum/">https://spacenews.com/fcc-commissioner-defends-c-band-alliance-but-renews-call-for-more-5g-spectrum/</a> (quoting a CBA official as stating that the CBA is "aggressively looking at clearing more than 200 megahertz" of C-Band spectrum for 5G).

<sup>&</sup>lt;sup>5</sup> Though the 5G Plus Plan would clear well over 300 megahertz of C-Band spectrum, its offloading of MVPD traffic onto fiber would leave non-MVPD earth station users (including public radio) with C-Band transponder capacity that is significantly greater than the capacity required to meet their needs, through at least 2025. *See* 5G Plus Plan Detailed Proposal at 7.

• The 5G Plus Plan fully covers transition costs. Next, ACA Connects notes that the 5G Plus Plan would cover all transition costs for existing C-Band users, including any costs of reconfiguring earth stations to receive programming from a different satellite transponder or to point to a different satellite when and if necessary. The plan does not "assume[that] TPEs [are] interchangeable" such that the same repacking costs would be incurred by each user or each earth station.

- The 5G Plus Plan includes robust interference protections. In addition, the 5G Plus Plan includes protections to mitigate interference risk that are comparable to those of other plans. In particular, the 5G Plus Plan, like the CBA plan, proposes a 20-megahertz guard band. The 5G Plus Plan would also allocate funds to install filters in C-Band earth stations to further protect against interference from 5G signals. In addition, the proponents of the 5G Plus Plan have called for reasonable out-of-band emission ("OOBE") requirements to ensure the viability of 5G operations in the band without compromising satellite downlink operations.
- Only the 5G Plus Plan includes strong mechanisms to ensure continuity of satellite service. Finally, the 5G Plus Plan includes more robust protections than NPR acknowledges to ensure that C-Band customers continue to receive satellite service without sudden price increases during and after the transition. Under the 5G Plus Plan, satellite operators would be compensated for transition costs, including costs to launch new satellites, during the five years in which the multichannel video industry migrates to fiber. Satellite operators would also be compensated for their loss of revenue from video programmer customers during the two years following the five-year transition. Also, over the course of this combined seven-year period, satellite operators would be eligible to receive yearly incentive payments in exchange for continuing to provide service to existing earth station customers without price increases. In other words, rather than being "[l]ikely [to] increase [the] cost of satellite service," the 5G Plus Plan is well positioned "to ensure satellite availability [with] current contract pricing." The CBA plan, by contrast, lacks any price commitment and any mechanism to ensure that satellite

<sup>7</sup> See Reply Comments of ACA Connects, Competitive Carriers Association and Charter Communications, Inc. GN Docket No. 18-122 at 17-18 (filed Aug. 14, 2019). It is worth noting that the CBA has *relaxed* the OOBE requirements it proposed originally after mobile wireless carriers and equipment manufacturers deemed the requirements too restrictive for 5G. See Comments of CBA, GN Docket No. 18-122 at 32-34 (filed Aug. 7, 2019). More recently, the CBA has embraced a proposal from Verizon that would endow 5G operators in the C-Band with more flexibility to implement their choice of measures to protect incumbent operations from interference. See Letter From Jennifer Hindin, Counsel to CBA, to Marlene H. Dortch, Secretary, FCC at 2 (filed Sept. 18, 2019). It is unclear the extent to which NPR's analysis of the CBA plan takes into account these new developments.

<sup>&</sup>lt;sup>6</sup> See 5G Plus Plan Detailed Proposal at 33, n.2.

<sup>&</sup>lt;sup>8</sup> See 5G Plus Plan Supplement at 17.

service will remain available to earth station users at affordable rates for any period of time after spectrum is repurposed for 5G.

Protecting existing users of the C-Band is a key tenet of the 5G Plus Plan and a core priority of ACA Connects in any transition of the band. As discussed above, the 5G Plus Plan includes protections for existing users of the band, including public radio stations, that match or exceed those of the alternative plans that NPR analyzes in its presentation. We appreciate the opportunity to clarify and underscore these aspects of the 5G Plus Plan.

Sincerely,

Brian Hurley